



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/837,133	04/18/2001	Ralph Thomas Beeston	TUC920010028US1	7364

7590 04/19/2004

Dale F. Regelman  
LAW OFFICE OF DALE F. REGELMAN  
4231 S. FREMONT AVENUE  
Tucson, AZ 85714

EXAMINER
----------

SURYAWANSHI, SURESH

ART UNIT	PAPER NUMBER
----------	--------------

2115

DATE MAILED: 04/19/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/837,133

Applicant(s)

BEESTON ET AL.

Examiner

Suresh K Suryawanshi

Art Unit

2115

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 April 2001.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11, 30-40 and 59-65 is/are pending in the application.  
4a) Of the above claim(s) 12-29, 41-58 and 66-79 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-11, 30-40 and 59-65 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 18 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2.  
4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. 4.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-11, 30-40 and 59-65, drawn to validation of a system configuration, classified in class 713, subclass 1.
  - II. Claims 12-29, 41-58 and 66-79, drawn to evaluate performance of i/o devices and bus, classified in class 702, subclass 182.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instance case, invention I has separate utility such as validating system configuration on power up without the need of evaluating the performance of input/output devices and bus. See MPEP § 806.05(d).

3. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purpose as indicated is proper.

Art Unit: 2115

4. During a telephone conversation with Dale F. Regelman on March 29, 2004 and March 30, 2004 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-11, 30-40 and 59-65. Affirmation of this election must be made by applicants in replying to this office action. Claims 12-29, 41-58 and 66-79 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Claims 1-11, 30-40 and 59-65 are presented for examination.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 2 and 31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contain subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicants fail to disclose the detail of "a multi-ported device" in their detailed specification. Applicants are reminded that no new matter is allowed in amendment to the specification under 35 U.S.C. 132 and 37 CFR 1.118(a).

*Drawings*

8. This application, filed under former 37 CFR 1.60, lacks formal drawings. The informal drawings filed in this application are acceptable for examination purposes. When the application is allowed, applicants will be required to submit new formal drawings. In unusual circumstances, the formal drawings from the abandoned parent application may be transferred by the grant of a petition under 37 CFR 1.182.

*Claim Rejections - 35 USC § 102*

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1- are rejected under 35 U.S.C. 102(b) as being anticipated by Garner et al (US Patent no 5,014,193).

11. As per claims 1, 30 and 59, Garner et al teach

mapping said one or a plurality of input/output devices [col. 1, lines 7-12; col. 6, line 5 – col. 7, line 7; inherent to a computer system to map it's input/output devices at power up];

Art Unit: 2115

generating an apparent system configuration [col. 2, lines 4-7; Fig. 3; col. 5, lines 3-23; current system configuration];

comparing said apparent system configuration with each of said one or more valid system configuration [col. 2, lines 1-16; verifying current configuration with last configuration; col. 3, lines 24-34; comparison between current configuration to the system's prior configuration];

selecting a first valid system configuration [Fig. 3, 4, 5, 6, 7, 8, 9 and 10; selecting one of the configuration (jump to configuration sub routine) based on comparison result between current and last configuration data; col. 3, lines 24-34]; and

configuring said data storage and retrieval system using first valid system configuration [abstract; col. 2, lines 1-16; auto configuration of the system between two setups – office and home, or office and self-contained while traveling].

12. As per claims 3 and 32, Garner et al teach that bus comprises one or a plurality of interconnections [Fig. 1].

13. As per claims 5 and 34, Garner et al teach

querying each one or a plurality of input/output devices [col. 3, lines 35-49]; and

Art Unit: 2115

receiving second information from each of said one or a plurality of input/output devices [col. 3, lines 35-49].

14. As per claims 7, 36 and 61, Garner et al teach

identifying each of said one or a plurality of input/output devices [col. 3, lines 35-49; drive type];

locating each of said one or a plurality of input/output devices [col. 3, lines 35-49; internal or external drives as drive A or drive B]; and

determining the connectivity of each of said one or a plurality of input/output devices [col. 3, lines 35-49; speed; communication ports].

15. As per claims and 40, Garner et al teach

selecting a second valid system configuration [Fig. 3, 4, 5, 6, 7, 8, 9 and 10; selecting one of several valid configurations];

modifying said apparent system configuration to match said second valid system configuration [col. 2, lines 1-9; col. 3, lines 3-8; the system configuration is updated without user interaction]; and

configuring said data storage and retrieval system using said second valid system configuration [abstract; col. 2, lines 1-16; auto configuration of the system between two setups – office and home, or office and self-contained while traveling].

16. As per claim 60, Garner et al teach

query each of said one or a plurality of input/output devices [col. 3, lines 35-49]; and

receive second information from each of said one or plurality of input/output devices [col. 3, lines 35-49];

wherein said second information comprises identify, device type, device location, and device nominal performance specification [col. 3, lines 35-49].

17. As per claim 65, Garner et al teach computer readable program [col. 3, lines 3-34; software of the present invention].



***Claim Rejections - 35 USC § 103***

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 2, 4, 8-10, 31, 33 and 62-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garner et al (US Patent no 5,014,193).

20. As per claims 2 and 31, Garner et al disclose the invention substantially. Garner et al do not expressly disclose about a multi-ported device. However, Garner et al disclose the knowledge of input/output devices connected to the system and a routineer in the art would know about SCSI devices having multi-port as SCSI devices are well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a multi-ported device as an input/output device. Moreover, the big advantage of using a SCSI device is that another SCSI device can be added to the existing SCSI device through the multi-port without need of an extra port in the host machine.

21. As per claims 4 and 33, Garner et al disclose the invention substantially. Garner et al do not expressly disclose about a SCSI device. However, a routineer in the art would know about a SCSI device as a SCSI device is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a SCSI device as an

Art Unit: 2115

input/output device. Moreover, the big advantage of using a SCSI device is that another SCSI device can be added to the existing SCSI device through the multi-port without need of an extra port in the host machine.

22. As per claims 8-10, 37-39 and 62-64, Garner et al disclose the invention substantially. Garner do not expressly disclose about displaying configuration or messages. But, Garner et al disclose about a LCD display in the system [Fig. 1] and knowledge of generating and reporting error message [col. 4, lines 26-29; col. 7, lines 29-32; col. 8, line 30]. However, a routineer in the art would know how to display various messages and information as it is quite common in the art. Therefore, it would have been obvious to one of ordinary skill in the art to display the system configuration and error/correction messages as it would provide a user-friendly system. Moreover, a user of the system would easily know if the system has been configured properly.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suresh K Suryawanshi whose telephone number is 703-305-3990. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on 703-305-9717. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sks  
April 6, 2004

THOMAS LEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100